

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended): In a machine vision system having a plurality of vision processors (VPs), each VP being on a respective VP computing platform, and at least one user interface (UI), the at least one UI being on a UI computing platform, a method for instructing a UI in communication with a first VP to establish communication with a second VP, the method comprising:

providing a first VP with a link function, the first VP being on a first VP computing platform, the link function being a control function executable by the first VP, and

the link function being both for enabling a user to configure any second VP using the at least one UI, and for establishing communication between a the any second VP of the plurality of VPs and the at least one UI on the UI computing platform, the any second VP being on a second VP computing platform.

the communication enabling a continually updated image display on the at least one UI representing a current state of the any second VP; and

executing the link function so as to issue instructions from the first VP to the UI to establish communication with the any second VP.

2. (previously presented) The method of claim 1, wherein the link function includes:

a VP control function having a plurality of parameters, including at least an identifier of the second VP.

3. (previously presented): The method of claim 1, wherein executing the link function includes:

clicking on a graphical representation of the link function displayed by the UI.

4. (previously presented): The method of claim 3, wherein the graphical representation of the link function is an underlined text string displayed by the UI.

5. (previously presented): The method of claim 1, wherein instructions from the first VP to the UI includes:

a plurality of parameters, including at least an identifier of the second VP, and at least one of a description of a view of the second VP, and a cursor position of the second VP.

6. (previously presented): The method of claim 1, wherein executing the link function is initiated by a user.

7. (previously presented): The method of claim 6, wherein executing the link function is initiated by a user via the at least one UI.

8. (previously presented): The method of claim 7, wherein the at least one UI includes a check box.

9. (previously presented): The method of claim 7, wherein the at least one UI includes a radio button.

10. (previously presented): The method of claim 1, wherein executing the link function is initiated by an external event.

11. (original): The method of claim 10, wherein the external event is an industrial process event.

12. (previously presented): The method of claim 10, wherein the external event is a change in the state of a sensor.

13. (previously presented): The method of claim 1, wherein executing the link function is initiated by a programmatic decision.

14. (previously presented): The method of claim 1, wherein executing the link function is initiated by a human decision.

15. (previously presented): The method of claim 1, wherein executing the link function includes:

including the link function in a function execution sequence of the VP.

16. (previously presented): The method of claim 1, wherein the link function also terminates communication with a the first VP in addition to establishing communication with a the second VP.

17. (previously presented): The method of claim 1, wherein the link function enables local dynamic display of images provided by a camera of the second VP on the at least one UI.

18. (canceled)

19. (canceled)

20. (currently amended): In a machine vision system having a plurality of vision processors (VPs), each VP being on a respective VP computing platform, and at least one user interface (UI), the at least one UI being on a UI computing platform, a method for instructing a UI in communication with a first VP to establish communication with a second VP, the method comprising:

providing a graphical representation, included in the at least one UI, the graphical representation being adapted to respond to user action so as to cause the first VP on a first VP computing platform to instruct the at least one UI on a UI computing platform to establish communication with the any second VP on a second VP computing platform,

the communication enabling a continually updated image display on the at least one UI representing a current state of the any second VP; and enabling a user to configure the any second VP using the UI.

21. (original): The machine vision system of claim 20, wherein the plurality of VPs and the at least one UI are interconnected via a network.

22. (original): The machine vision system of claim 21, wherein the network supports a TCP/IP network protocol.

23. (previously presented): The machine vision system of claim 20, wherein the user action includes selecting the graphical representation.

24. (previously presented): The machine vision system of claim 20, wherein the user action is a mouse click upon the graphical representation.

25. (original): The machine vision system of claim 20, wherein the graphical representation is an underlined text string.

26. (currently amended): A user interface (UI) for a machine vision system having a plurality of vision processors (VPs) including a first VP on a first VP computing platform, and a second VP on a second VP computing platform, the user interface comprising:

a spread sheet; and

a graphical representation, the graphical representation being incorporated in the spreadsheet, the graphical representation being adapted to respond to user action so as to cause a first VP to instruct the UI to establish communication with a any second VP of the plurality of VPs, the communication enabling a continually updated image display on the UI representing a current state of the any second VP, and enabling a user to configure the any second VP using the at least one UI.

27. (previously presented): The user interface (UI) of claim 26, wherein the graphical representation is further adapted to respond to user action so as to cause the UI to terminate communication with the first VP of the plurality of VPs.

28. (original): The user interface (UI) of claim 26, wherein the graphical representation is an underlined text string.

29. (original): The user interface (UI) of claim 26, wherein the graphical representation is an iconic representation.

30. (currently amended): A machine vision system comprising:  
a plurality of vision processors (VPs), each VP being on a respective VP computing platform;

at least one user interface (UI), the at least one user interface (UI) being on a UI computing platform, the UI being in communication with a first VP of the plurality of VPs, the UI including:

a graphical representation visible to a user, the graphical representation being adapted to respond to user action so as to cause the first VP to instruct the UI to establish communication with a any second VP of the plurality of VPs,

the communication enabling a continually updated image display on the UI representing a current state of the any second VP, and enabling a user to configure the any second VP using the UI.

31. (original): The machine vision system of claim 30, wherein the plurality of VPs and the at least one UI are interconnected via a network.

32. (original): The machine vision system of claim 31, wherein the network supports a TCP/IP network protocol.

33. (original): The machine vision system of claim 30, wherein user action is a mouse click upon the graphical representation.

34. (original): The machine vision system of claim 30, wherein the graphical representation is an underlined text string.